CLEAN COPY OF CHANGES TO THE SPECIFICATION

IN THE SPECIFICATION

Top of page 2, please insert:

D1 (a) Title of the Invention.

Page 2, after line 3, please insert:

Cross-References to Related Applications. (not applicable)

Statement Regarding Federally Sponsored Research or Development.

(not applicable)

D2 Reference to a "Microfiche Appendix" (see 3 7 CFR 1.96).

(not applicable)

Background of the Invention.

1. Field of the Invention.

Page 2, after line 13, please insert:

2. Description of the Related Art including information disclosed

D3 under 37 CFR 1.97 and 1.98.

Please amend the last paragraph on page 2 and bridging to page 3 to read as follows:

Many fields in clinical research and diagnostics, pharmacological drug testing as well as food analytics, require a precise cognition of concentrations of determined nucleic acids (deoxyribonucleic acid [DNA] or ribonucleic acid [RNA]) in a sample to be analyzed. For the measurement of extremely small analyte concentrations, enzymatic amplification methods are frequently used. Hereby, the following methods are *inter alia* concerned: polymerase chain reaction (PCR, US Patents 4,683,195 and 4,683,202, EP 0 201 184; Hoffmann-La Roche), ligase chain reactions (LCR, Abbott Diagnostics, North Chicago, IL, USA), strand displacement amplification (SDA, Walker et al. [1993], PCR Methods Appl.. 3: 1-6 Becton-Dickinson Research Center) and transcription-mediated amplification (TMA, Gen-Probe Inc., San Diego, CA), by means of which analyte nucleic acid concentrations can be measured with an extremely high sensitivity. A prerequisite for the quantitative use of all of the mentioned technologies is the availability of suitable synthetic or native nucleic acid standards of a precisely defined concentration, which either are used as external, i.e. amplified in parallel assays, or as internal standards (i.e. so-called

competitors amplified simultaneously in the same assay). Whereas the preparation of suitable standards is known to the person skilled in the art (Zimmermann and Mannhalter 1996, Biotechniques 21: 268-279, Koehler et al. 1995, Quantitation of mRNA by polymerase chain reaction - nonradioactive PCR methods, Heidelberg, Springer-Verlag), hitherto unsolved problems of process technology exist with the transfer of these standards into a stable form which is ready for application, said fact being a basic prerequisite for the reproducible measurement of unknown nucleic acid concentrations. Problems exist in particular with the best possible storage of highly diluted nucleic acids. These essentially reside in that in practice, extremely low-concentration standard dilution series are worked with in most cases (approx. 1 - 100000 molecules per reaction assay), which despite of a storage at temperatures between -20° C and -80° C, are often unstable (Koehler et al. 1997, Biotechniques 23: 722-726). Problem of instability was initially solved by stabilizing low-concentration nucleic acid dilutions in the way, that a defined quantity of a specific carrier nucleic acid is added to the dilution, said carrier nucleic acid featuring a sequence homology to the nucleic acid sequence to be detected which is as small as possible (DE Kant et. al. 1994, Biotechniques 17: 934-942, Koehler et al. 1997, Biotechniques 23: 722-726). However, this does not always lead to

success (cf. Figure 1), so that it is generally recommended to carry out all the required dilution steps starting every day anew from a stock solution with a defined concentration. This, however, is connected with the disadvantage that the standards used must be prepared in a labor-intensive manner, that they are subjected to a varying pipetting accuracy, and valuable diluted batches can only be used in part. Thus, costs and time expenditure automatically increase at a simultaneously reduced reproducibility and reliability of the methodology. From the application-technical point of view, the depicted procedure is therewith uneconomical, succumbed to several disturbance factors, and hence inappropriate for diagnostic routine laboratories.

D4

Page 3, after line 23, please insert:

D5

Brief Summary of the Invention.

Page 4, after line 25, please insert:

Brief Description of the Several Views of the Drawing(s).

D6

Fig. 1 shows a diagram of a typical calibration graph,

Fig.2 shows a graphic plot with a comparison of the coating method according to the present invention and the state of the art,

Fig. 3 shows a plot with polymerase chain reaction (PCR) results, and

Fig. 4 shows a plot with TaqMan PCR results .

Detailed Description of the Invention.